Additional File 2.

Demographics of the participants excluded for excessive motion

	ADHD	Siblings	Control	Comparison*
	N=13	N=1	N=2	Unequal**
	Mean±SD	Mean	Mean±SD	
Age (years)	13.62±2.82	14.06	12.45±1.42	ADHD _{excl} <adhd<sub>incl</adhd<sub>
				CON _{excl} <con<sub>incl</con<sub>
IQ	91.54±14.15	112	104.50±14.85	NS
Conners Score (Combined Scales)	30.15±9.48	5	5±4.24	ADHD _{excl} >ADHD _{incl}
Conners Inattentiveness	16.77±5.21	2	4.5±3.54	NS
Conners	13.38±5.82	3	0.5±0.71	ADHD _{excl} >ADHD _{incl}
Hyperactivity/Impulsivity				
CSBQ ASD	10.31±8.91	2	3.5±4.95	NS
CSBQ Lack of Social Interest	3.85±	2	2±3.62	NS
CSBQ Problems with Social	3.92±	0	1±1.41	NS
Understanding				
CSBQ Stereotypical Behavior	1.38±	0	0±0	NS
CSBQ Resistance to Change	1.15±	0	0.5±0.71	NS
Adult	0%	0%	0%	ADHD _{excl} <adhd<sub>incl</adhd<sub>
Site	31%	0 %	50%	NS
Sex	54% M	0% M	50% M	NS

*Comparison of distributions in excluded and included diagnostic groups using Mann-Whitney tests at p<0.05. The *Siblings* groups did not show significant differences but results cannot readily be interpreted due to exclusion of only 1 sibling; similar caution should be taken when interpreting the results in the *Control* group (n=2). **Participants with ADHD are significantly overrepresented in the exclusion sample compared to their proportion in the included sample (as tested with a Mann-Whitney test). **SD**=Standard deviation; **ADHD**=participants with ADHD; **SIBS** = unaffected siblings, **CON**= unrelated control participants. **Adult**= % of participants aged 18 years or older. **Site** = % of participants scanned in Amsterdam (the remainder was scanned in Nijmegen). Incl=Included participants; Excl=Excluded participants. **M**=Male. **NS**= not significant.

Demographics of participants excluded for having too few MID trials

	ADHD	Siblings	Control	Comparison*
	N=52	N=13	N=17	Unequal**
	Mean±SD	Mean	Mean±SD	
Age (years)	15.91±3.43	13.42±2.55	14.61±3.10	ADHD _{excl} <adhd<sub>incl SIBS_{excl}<sibs<sub>incl</sibs<sub></adhd<sub>
				CON _{excl} <con<sub>incl</con<sub>
IQ	94.79+16.34	105.77±13.72	107.47±12.40	NS
Conners Score (Combined Scales)	23.63±11.00	5.92±5.81	4.71±4.38	NS
Conners Inattentiveness	13.35±6.11	3.54±3.33	3.47±3.24	NS
Conners	10.31±6.20	2.38±2.63	1.24±1.60	NS
Hyperactivity/Impulsivity				
CSBQ ASD	10.12±9.53	11.31±9.81	4.12±5.36	NS
CSBQ Lack of Social Interest	3.48±4.42	4.85±4.90	1.29±1.69	NS
CSBQ Problems with Social Understanding	4.46±3.96	3.69±2.70	2.00±2.72	NS
CSBQ Stereotypical Behavior	1.44±1.85	1.15±2.12	0.53±1.38	NS
CSBQ Resistance to Change	0.73±1.09	1.62±2.14	0.29±0.77	NS
Adult	29%	12%	0%	ADHD _{excl} <adhd<sub>incl SIBS_{excl}<sibs<sub>incl CON_{excl}<con<sub>incl</con<sub></sibs<sub></adhd<sub>
Site	48 %	54%	35%	NS
Sex	35% M	69% M	47% M	NS

*Comparison of distributions in excluded and included diagnostic groups using Mann-Whitney tests at p<0.05. **Participants with ADHD are significantly overrepresented in the exclusion sample compared to their proportion in the included sample (as tested with a Mann-Whitney test). **SD**=Standard deviation; **ADHD**=participants with ADHD; **SIBS** = unaffected siblings, **CON**= unrelated control participants. **Adult**= % of participants aged 18 years or older. **Site** = % of participants scanned in Amsterdam (the remainder was scanned in Nijmegen). Incl=Included participants; Excl=Excluded participants. **M**=Male. **NS**= not significant.